

Australian Political Studies Association 2017 Presidential address

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Political science and research collaboration: a difficult relationship?

Research collaboration, broadly meaning teams of researchers working together on a common topic, is being encouraged within countries, between countries, within regions, and globally. It features in national research policy in the form of grants that encourage it, and this is mirrored in the strategies of individual universities. This trend has escalated. Individual academics are being urged to join teams, small teams are encouraged to merge with others and become bigger teams, and institution-wide collaborations are spreading, as are inter-institutional collaborations. Many of these are deliberately tilted towards inter-disciplinary and multinational teams and towards partnerships between academic and non-academic institutions. This push is backed by a belief that better research results from “many different brains working on the same question”: collaboration is also seen as necessary to address grand challenges, and increase research productivity and research impact.

One marker of this trend, although as I will argue later, it is not the only one that we should focus on, is the rapid growth in co-authorship of academic publications. Some discipline areas have moved in this direction more slowly than others. Compared to the biological and physical sciences or the STEM (science, technology, engineering and mathematics) disciplines as they are often referred to, political science, like the humanities and social sciences more generally, has changed only quite recently to more co-authorship practices. To illustrate this, we tracked co-authorship back to the year 1990 for a number of journals – and my thanks to Hamish Wallace one of our talented undergraduates for his help with this.

Australian political science appears to be more similar to British than American political science on co-authorship as can be seen on this slide. Co-authorship in the AJPS has increased from 20 to 41%, which is similar to Political Studies, but both of these lag behind APSR at 53%. While the AJPA was behind the curve on co-authorship in 1990-99 at 17%, an increase in co-authorship has since brought it into line with two highly regarded international journals – all three are now around 60%. This puts policy and administration slightly ahead and political science slightly behind a recent comparison of a range of HASS disciplines on co-authorship (see: Haddow et al 2017).

Percentage of articles with 2 or more authors

	1990-99	2000-09	2010-17
AJPS	20	30	41
Political Studies	17	29	41
APSR	46	41	53
AJPA	17	34	60
Public Administration	39	50	60
Policy Sciences	25	41	61

For ARC grants, there is no clear trend of multiple CI grants awarded as either increasing or decreasing over 2010-17 for either policy and administration (code 1605) or political science (code 1606). However, 70% of policy and administration grants have multiple CIs, compared to 40% of political science, over this period.

While co-authorship is an imperfect measure for all that research collaboration entails, it does signal something about the discipline of political science that is worth exploring. Collaboration is generally conceived of as having two basic elements: 1) working together with the purpose of achieving a common goal; and 2) sharing knowledge. Here I am concerned with collaboration within the discipline as well as interdisciplinary collaboration and partnerships with non-academics – that is, it is simply the opposite of individual scholarship.

Let me be clear that I am not beginning from a stand point that regards collaboration as positive in all circumstances, or to address every kind of research question. But there are potential benefits, including: access to others' expertise, insights from other disciplines (in the case of interdisciplinary collaboration); increased chances of getting funding; gaining tacit knowledge; education, training and mentoring benefits; increased visibility and impact; as well as the pleasure and intellectual stimulation of working with others (Bozeman and Corley 2004). And because it is a direction that research policy around the globe supports, it is an important trend for this discipline to come to grips with.

Four reasons for resisting collaboration

So why are we not embracing collaboration more, given the substantial benefits on offer? There are obviously numerous possible explanations and I will focus only on a few: these are disciplinary, structural, individual and related to dissonance.

A disciplinary explanation suggests that the reasons we don't engage more in collaboration is because it doesn't fit well with the ontology, the epistemology, and the approaches and methods that we use. Political science knowledge is not paradigmatic, continually building on things that have been proven and agreed upon. This means the epistemic foundations of collaboration can be shaky, even within the discipline, and substantial time must be spent defining terms and establishing what the group agrees upon before any new work can begin. With time pressures uppermost in the minds of many academics, this last point becomes a major disincentive to collaboration, and particularly to interdisciplinary collaboration.

A structural explanation would posit that the kind of institutional environments that we sit within, and the professional associations we belong to, like APSA, somehow discourage collaboration. This explanation encompasses the enduring structures in universities, as well as how we are trained as undergraduates, postgraduates and early career academics, and how we teach. As Andrew Abbott (2001) so memorably put it in his book 'Chaos of disciplines', we are "held in place" by both university structures and disciplinary traditions. Departments generally place people from the same discipline together and schools that contain multiple disciplines still use disciplines as an organizing principle. Associations, like APSA, are discipline based, although they contain sub-disciplines (such as political theory, public policy and international relations). These institutional and disciplinary structures tend to encourage distinction and separation.

We also emphasize individual research practices. As undergraduates we wrote individual essays and exams as the major assessment tasks, and we generally continue to set these for our students. As PhD students we wrote lengthy dissertations and our own PhDs continue to do the same. Rarely do we co-author with our students. There is not much about this training that encourages team work. Added to this is the high level of competition that occurs between universities, faculties, departments and individuals, for everything, including world rankings, research funding, partnerships, students, media attention, and for a place in highly ranked publication outlets. Competition is often not the friend of collaboration.

A third potential explanation for resisting collaboration is that political science as a discipline attracts individuals who value their autonomy above all else and loathe the idea that someone is directing their research interests. Or perhaps political scientists are particularly fixed on being individual stars, and so are unwilling to share their ideas and authorship. This is backed by systems that do often still reward individual scholarship above collaboration – some of you will have sat on selection panels where questions have been raised over applicants who have never published alone. Some institutions fractionate co-authored publications, diminishing their value in a very direct fashion. Intrinsic motivation to do research sits alongside academics' desire for recognition and reputation, as Robert Merton (1973) pointed out, so collaboration might also mean having to share the glory. Here's a favourite quote capturing this from an interview I did a few years ago.

“Co-authoring takes twice as long and you receive half the credit”

The fourth explanation is one of dissonance. That is, political scientists don't collaborate because it is seen as a threat to the foundations of academia and therefore should be resisted. Dissonance is created when an individual regards incentives to collaborate as a means of imposing a managerial agenda on themselves and their work. Political scientists, and all academics, have good reasons to think this of course – note that I began this talk by pointing to the rise of research policy that encourages collaboration based on a belief that one of its benefits is an increase in research productivity. Dissonance also results from a belief that, because collaboration apparently underpins the success of the hard sciences, it is being used as a means to force others into team structures, against our favoured disciplinary way of working. And dissonance arises where collaboration is seen as something that will result in more work rather than less, and will impede academic scholarship rather than improve it. Each of these reasons for not collaborating is commonly raised within our discipline around Australia.

There are certainly disciplinary and structural reasons why political science has not fully embraced collaboration. Yet there are bound to be instances when collaboration might be beneficial. I think that dissonance is also playing an important role in curbing our enthusiasm. One main point of resistance to collaboration is the idea of autonomy. Autonomy and its relationship to collaboration is what I will focus on next.

Autonomy and research collaboration

A common dictionary definition of autonomy is that it is the capacity of a rational individual to make an informed, un-coerced decision. For an individual, autonomy is generally associated

with independence or freedom, and the ability to direct one's own actions. For institutions or nations, it is also associated with independence and freedom from external control, as well as the right or condition of self-government. Autonomy for both individuals and institutions is relevant to this discussion, and there is a lot that could be said about the institutional autonomy of universities within the Australian higher education system. Many claim that this institutional autonomy has been diminished by the growing use of accountability mechanisms by governments and other funders. For the following discussion, however, I will concentrate solely on individual autonomy.

Autonomy is regarded as necessary for the unhindered pursuit of curiosity. Individual autonomy remains a powerful idea in contemporary universities, no matter how bounded that autonomy might be in practice. Academics themselves define it in different ways. A study of Australian social scientists' views on autonomy found that freedom from interference is widely held to be important, but beyond this, some academics feel that this should be without constraints, while others think this should be regulated by academics themselves, or by collegial, institutional or societal standards (Kayrooz, Kinnear and Preston 2001). Studies of academic autonomy also show differences across and within countries, between universities, and between disciplines (for example: Bleiklie and Byrkjeflot 2003). Academic freedom is clearly set against the perceived and actual constraints of university and national policy settings, and disciplinary understandings of how research should be conducted.

Given autonomy's importance, it seems that understanding how it and collaboration fit together might illuminate the collaborative lag. Intuitively this seems like a fruitful area of inquiry that might uncover some fundamental problem that academics have with team work. If we are all focussed on our individual ideas and interests then we might well see collaboration as a threat to academic freedom. So, is collaboration regarded by academics as something that leads to a reduction in autonomy?

To discover more about this, in 2014-15 a small number of interviews (18) were conducted at The University of Melbourne – and my thanks to Peter Woelert my colleague in Education for doing most of these. These people were evenly split across the Humanities (5), Sciences (6) and Social Sciences (7). The interviewees were asked a few questions on autonomy. These were:

1. What does autonomy mean for you as an academic?
2. Do you think you have a lot of autonomy in regard to doing research? What sorts of things impact on your autonomy?
3. How would you describe the relationship between autonomy and collaboration?

I will talk about each of these in turn.

What is autonomy?

By far the most common response to this question: 'What is autonomy?' was the idea that it is related to the freedom to pursue one's own ideas and interests, to choose the topics to work on, to decide which people to work with and how much, the freedom to think, to express opinions in public, and to engage outside the academy. These appeared across all three discipline groups.

One person in the humanities equated autonomy with independent thought and having your own ideas and another regarded working autonomously as crucial to quality research. It was also common to mention that it was about NOT being managed, or forced into particular topics, or being told what kind of research to do. One Humanities scholar said it is *"the single most important thing in academia"*.

The social scientists interviewed tended to respond with statements about the boundedness of their autonomy, such as: *"Well, you do not have ... autonomy in that sort of absolute sense"*, or *"it's a myth, but at another level I would regard myself as having a high level of autonomy"*. One commented:

"Autonomy... I would like to think we have, there's no such thing, okay I can't see it. I really can't see it".

Those in the sciences linked autonomy to funding in a number of ways. One was having your own funding so that you are the person leading the research team:

"I have full autonomy, that means there is nobody here that is telling me what to do ... there's no issue because I have the funding to do that research".

Another was having the autonomy to take on contract work in order to get the funds to do more intellectually exciting work:

"doing commercial work and feeder service and stuff like that, and having research contracts and things like that - we make that sacrifice in order to raise funds to be able to do the things that we want to do".

So the idea of autonomy appears to be equally important for all disciplines, even though it might be viewed a bit differently.

What impacts on autonomy?

Across the discipline areas, time constraints were seen to impact on autonomy. For humanities scholars the pressure to publish and the need to apply for grants, and performance measurement were all mentioned. This is captured in this quote:

“the sensed pressure to publish a lot, that really impacts. ... to get large competitive grants which is very, very serious pressure, and ... just the bureaucratic micromanagement”.

Social scientists mentioned administration, performance measurement, teaching, PhD supervision, engagement, lack of funding, and applying for grants on topics that are likely to get funded rather than those you are really interested in, as all impacting on autonomy. One commented that:

“So in that sense, there’s no autonomy at all”.

Strategic research priorities set by the ARC or university were mentioned by scientists, along with the university management constraining academics from providing independent opinions.

Two of this group indicated that they don’t see many impacts, and that *“nobody is telling me what to do”*.

The relationship between autonomy and collaboration

By and large, autonomy and collaboration were not seen to be in opposition and in most cases they were regarded as mutually supportive. This was the case for each of the discipline groups.

Amongst the humanities scholars, collaboration was seen as increasing autonomy (because new things were learnt and one’s own thinking might be clarified), and as complementing it if there was mutual respect and individuals could work autonomously within a team. One interviewee suggested that collaboration was autonomy plus negotiation about the goals of the collaboration. Another humanities interviewee stated:

“Well, if I was working with somebody else on a project we would have to agree about things as far as possible.”

Some social scientists had a pessimistic view of the relationship, making statements such as: *“if I’ve been dragged into somebody else that controlled a project, of course I lost my autonomy”*,

and “you have to stop and adjust your direction for others ... the notion of discovery is lost in collaboration”.

Others saw autonomy and collaboration as improving research. For example:

“Yeah they can co-exist. I mean a good collaboration is when you bring what you’re interested in and your skills into a project and you ... have your ideas challenged and refined and they grow through that process.”

Some social scientists agreed with those in other disciplines about autonomy supporting collaboration and even collaboration generating autonomy through new directions arising from the interaction.

The science scholars discussed the relationship as helpful (collaboration makes you a better autonomous researcher), or as coexisting (you need collaboration to get research done). One interviewee stated that you need to maintain autonomy in collaboration so that there is free exchange of expertise, while another said: *“So for me autonomy creates a platform for being able to be collaborative”*. Two of the science interviewees described autonomy as being related to having grants which means you are the leader of the collaboration. As one claimed:

“Autonomy is me being allowed to do whatever I like, and if I have a problem that I am driving, I ask someone to help me with that. So that’s collaboration.”

This is a small number of interviews from a single university, so I am not going to make grand claims. But they raise some interesting points: First, there are commonalities across the discipline groups in their views of autonomy; but the scientists tended to link it to funding in a positive sense (funding allows them to have autonomy). Second, time constraints were seen as the major factor impacting on autonomy and for humanities and social science scholars, the pressure to meet certain performance measurements were important, whereas these were not raised by the scientists. Third, autonomy and collaboration were generally regarded as mutually beneficial as long as autonomy was maintained, although the science scholars tended to be more positive about this relationship. It appears that potential impacts on autonomy are not necessarily a key reason to forego collaboration. So I will now move on to consider the meaning of collaboration in more detail.

Research policy shapes how institutions understand and measure collaboration, and how individuals respond to these signals. So what does collaboration really mean? Again, let me

stress that I am not saying that collaboration is always the answer. Like many of you, I have had bad collaboration experiences and understand that it can be very hard work. But I am interested in how we might find a way for it to support political science as a discipline in the future, in a landscape that is only likely to increasingly provide incentives for it.

What is collaboration?

The reasons why governments and other funding agencies are interested in supporting collaboration in the biological and physical sciences are easy to understand. Many of these require the joint use of expensive or unique equipment without which research would be less productive. Collaboration is often important for mentoring graduate students and postdoctoral researchers in these fields. Almost all of the thinking behind why collaboration might be a good thing is based on how the hard sciences work. And almost all of the research that examines the benefits of collaboration is based on studying the benefits produced in the STEM disciplines.

Further, in most of this thinking about and studying of collaboration, it is assumed that collaboration refers to a very concrete and instrumental form of working in teams. So not only is research policy based on what is seen to support collaboration in the hard sciences, and not only are studies of the benefits of collaboration generally based on those disciplines, but all of this rests on the most observable form of collaboration, which is co-authorship. The problematic assumptions and lacks in this research have been pointed out by a number of scholars (e.g. Katz and Martin 1997).

But few studies of collaboration have gone beyond assuming that all collaboration is concrete and results in co-authored publications. To understand the benefits of collaboration for humanities and social sciences or HASS disciplines, more nuance in the meaning of collaboration, and more understanding of what form of collaborative structures work best for them - and what benefits they actually produce - is needed.

Academics across all disciplines undertake collaborative activity, but not all collaboration has the same level of visibility. To address the problems posed by a tendency for analysis to be biased towards the more visible (and easily measurable) forms of collaboration, a distinction can be made between two types of collaboration. The first type is *concrete* - researchers formally work together on a project, designing it and undertaking it together, and co-authoring publications. The second type is *expressive* - it involves discussion of ideas, intellectual feedback

and commentary on research work. These two types of collaboration are not mutually exclusive (Lewis, Ross and Holden 2012) and either can lead to the other.

This distinction is useful for thinking about our discipline. We might assume that both types will be present to different degrees in different discipline areas. All, or almost all, academics are engaged in the expressive type while fewer engage in the concrete type. There are major differences between the discipline areas of humanities, social sciences and sciences, both in collaborative practices and in reasons why people work together or alone (see: Lewis, Ross and Holden 2012; Lewis 2013). Of course, within a discipline area there is diversity but this does not mean that there are no typical modes of collaborating in discipline areas.

Some data helps us better understand this and its importance for research policy and for the discipline of political science. A large study of academics at three universities in three nations gathered information on individuals' expressive collaboration (Lewis 2013). We asked people to name those that they discussed their ideas and interests with the most. An important finding was that this uncovers a network of at least a handful of colleagues, for all disciplines, for almost every one of the approximately 500 academics we interviewed.

This study was followed up at The University of Melbourne for the 91 academics interviewed there in 2008. Information was extracted from the university's publication database for each of these people, for a five year period. Since the actual names of these collaborators were collected in the expressive networks, we can map the degree of overlap with their co-authored publications. The sample is quite small - 63 individuals for whom information was available about their publications (see: Lewis, Letina and Woelert 2016). However, this does represent around 1000 publications. And a recent study of HASS articles found that 69% of them were sole authored (Haddow et al. 2017) which is similar to our findings.

Publications for the years 2009-2013

	Humanities	Social Sciences	Sciences
% sole authored publications (total)	76	62	0
Number of different co-authors	8.8	8.7	62.1
Overlap - expressive and concrete collaboration	1.9	2.1	4.9

Not surprisingly, significant differences in co-authorship patterns were found between disciplines. The percentage of single-authored papers is 76 and 62 for Humanities and Social Science academics (respectively), while in Science there was not a single sole-authored publication. Those in Humanities and Social Science disciplines had around nine different co-authors in the five year period on average, that number in Science disciplines was substantially higher – a mean of 62 different co-authors. This gives a clear picture of the scale differences in concrete collaboration across disciplines.

The degree of overlap between concrete and expressive networks is also shown on this slide. My hunch was that the overlap would be highest for Science, and that proved to be the case at around five people, and lowest for the Humanities (less than two). The differences are statistically significant,¹ even when scaled to take into account different maximal possible values of overlap in the different discipline groups.² They point to a greater fit of science with research policy, which is generally directed at concrete collaboration. This has major implications for the non-STEM disciplines, because much of what we do is not thought of as collaboration, or made visible as collaboration, plus the overlap between this and what will be regarded as collaboration is comparatively small.

Expressive collaboration happens organically, arising from disciplinary norms built around the sharing of ideas, and mutual interest in intellectual problems. It is crucial for all disciplines, because it is where discussion and exchange should improve our thinking. Concrete collaboration and its impact have rarely been studied outside the STEM disciplines (where a positive effect has been found between collaboration and productivity and citations), although a recent study of HASS co-authorship in Australia found that publications that were co-authored attracted more citations than sole authored publications (Haddow et al 2017).

Conclusion

I want to conclude with a few comments on what this means for political science in Australia. Assuming that collaboration will have benefits in some cases, both in terms of producing high

¹ One-way ANOVA: $p=0.00$; Independent Samples Median Test: $p=0.00$

² The number of co-authors was substantially higher for Science, making the possibility of overlap between concrete and expressive networks more likely. A second analysis that compares across the disciplines, based on the maximal possible value of the overlap, confirmed that this finding is not changed even when we take into account the maximal possible number of the overlap. The overlap between discussion and co-authorship networks is highest for Science and lowest for the Humanities, with Social Science sitting in between. Humanities scholars have simple co-authorship networks with few partners, Social Scientists have more co-authors and groups of co-authors, and Scientists have the most elaborate networks with many sub-groups and many people in each of these.

quality research and research that has a greater impact, and in better accessing funds, what should we, as a discipline, do?

The analysis of co-authorship trends in the journals that I began with shows that our concrete collaboration is increasing. But expressive collaboration is likely both more important and a better starting point for thinking about how to encourage more collaboration in political science. Political science and other HASS disciplines need to continually push back against national research policy and university pressures that reduce collaboration to concrete and countable forms alone. For political science, the results of collaboration incentives won't appear immediately and won't be in an instantly recognizable, visible form. We don't 'stand on the shoulders of giants' in the same way that paradigmatic disciplines do, and it takes us time to argue and negotiate a starting point.

But while it is easy to talk about what others should do to accommodate a view of collaboration that fits better with political science, we should also take a look at how we might change some of the structural and discipline barriers to collaboration that are more amenable to us as a discipline.

I think we need to construct models of collaboration that work for us. In between the extremes of very loose discussion networks that might be highly stimulating but don't result in new knowledge and the all-important publications, whether sole or co-authored, and tightly constructed and highly instrumental collaborations, there is a vast territory. Some refer to this as coordination, which sits between loose networks (just talk) and tight collaborations (concrete team projects). There are ways of maintaining autonomy while working collaboratively – as almost all of the interviewees in our small study discussed - and we can make use of them.

Related to this is our apparent reluctance to collaborate with other disciplines, or even with sub-disciplines in our own field. Many of us have probably had the experience of being approached to be the “token social scientist” on projects led by other disciplines. These are teams who have already done all the thinking about the questions to be addressed and the methods to be used, but see it might be helpful to include a political scientist. We could be much more proactive on this front, and should be out building relationships with others around our common interests. Then, when funding opportunities come up, political science will be central rather than an addendum, and there is already some level of understanding and rapport.

We could also think about conducting political science training differently. In Denmark, the Netherlands and other Northern European nations, group work is common for undergraduates and not just for Masters students working on consortium projects. PhDs include a substantial amount of coursework and are more and more commonly written as a series of publications plus an extended overview. The journal articles produced as part of this are often co-authored with supervisors. These PhDs are learning to develop their own research agenda, but also to do it within a coordinated group, and they are completing with a set of publications already in hand. While this seems more like the hard sciences, its translation to social science-based programmes elsewhere indicates it can work for us.

I think the discipline of political science has a difficult relationship with research collaboration. We face an array of challenges on this front, and it is particularly those just starting their careers, working in uncertain conditions, who especially need to find a way to deal with these. But I also think that there is hope and there are some things that we can do. First, we need to resist when collaboration is being too narrowly defined and create new models that are more appropriate for us. Second, we should more often take the initiative on interdisciplinary research, rather than responding to requests from others. Third, we should think about how we teach political science and train the next generation in PhD programmes, and look to other nations for models that might be helpful.

Acknowledgement: Thanks to two colleagues at the Copenhagen Business School – Jane Bjørn Vedel and Alan Irwin, and Peter Woelert in the Melbourne Graduate School of Education, for their feedback on an earlier draft of this address.

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